

2020286799

PHILIP MORRIS U. S. A.
INTER-OFFICE CORRESPONDENCE

To: R. P. Heretick **Date:** October 14, 1992
From: S. Tafur
Subject: Paper Development Weekly Summary

Wood Pulp Paper

GC-MS results for the pyrolysis of wood and flax papers were analyzed for two particular mass fragments that are characteristic of xylan and lignin pyrolysis products. The wood paper yielded a much larger peak for the xylan product than the flax paper, as expected from the hemicellulose compositions of the pulps.

Cigarette Paper Specifications Study

Machinability trials were run at the Manufacturing Center using Kimberly-Clark cigarette papers ranging in tensile strength from about 0.05 to 0.13 kg/mm width. Three bobbins each of seven different types of paper were scheduled to be run on a Protos maker at 10,000 cigarettes per minute. As expected, some difficulty was encountered in running the papers of lower tensile strengths (.05 to .06 kg/mm). One box of 4,000 cigarettes was obtained for each successfully run bobbin for quality inspections. Samples of paper from each bobbin will be evaluated for tensile strength, elongation, chalk content, porosity, basis weight, and citrate level. Further evaluation of the results is in progress.

Reduced Sidestream

Cigarettes were made in Semiworks with a series of U. Maine papers made with different types of calcium carbonate with selected sizings and several KC calcium carbonate papers. Samples have been submitted to CTSD for analytical smoking and sidestream visibility testing is in progress. Subjective comparisons among the various calcium carbonates and between comparable U. Maine and KC papers are also in progress.

Kimberly-Clark low porosity, calcium carbonate base papers [grade 003-V2 (45 g/m²) and grade 078 (40 g/m²)] were sized with a series of monopotassium phosphate (MKP) and acid combinations to produce reduced pH solutions. These papers were designed as potential candidates for increased sidestream reduction over current papers being used on low sidestream models. Cigarettes were made in Semiworks, including one model with a high ET content in the filler. They will be submitted to CTSD for analytical smoking and sidestream visibility testing and subjective evaluations will be conducted.

2020286800

PHILIP MORRIS U. S. A.
INTER-OFFICE CORRESPONDENCE
Richmond, Virginia

To: R.P. Heretick **Date:** October 21,1992
From: S. Tafur
Subject: Paper Development Weekly Summary

Wood Pulp Paper

The GC-MS spectra obtained from the pyrolysis of wood and flax papers were examined for levels of products obtained from the pyrolysis of lignin. One peak that was several times larger for the wood paper than for the flax paper was identified as SO₂. Samples of the wood and flax papers are being analyzed for levels of sulfur, chlorine, and nitrogen. Cigarettes made with the wood and flax papers will be tested for levels of sulfur-containing components in mainstream smoke utilizing methodologies with sulfur-specific detectors.

Papers consisting of blends of flax and wood have been requested from our paper suppliers for evaluation on cigarettes. Several samples ranging from 25% to 60% flax are being submitted by Kimberly-Clark and Ecusta.

Cigarette Paper Specifications Studies

A meeting was held with representatives from Purchasing, Quality Engineering, Technical Services and R&D to review recent results from the trial run of Kimberly-Clark paper in Bay 1 and smoke results with high chalk paper from DeMauduit. No problems were encountered in running the the K-C paper; however, the paper was analyzed as having higher than expected chalk levels.

A test conducted at the Manufacturing Center to determine differences between Ecusta and Kimberly-Clark papers for machinability and quality has been completed, and the results have been reported. Considerable cost savings might be realized in the reduction of freight costs and in expanding the fast-flow program by using more Kimberly-Clark cigarette paper at the Manufacturing Center.

During the month of August, Kimberly-Clark paper was run on two rows in Bay 1. Data collected during the test period were compared to data collected during the July control period, when Ecusta paper was being run in Bay 1. There were no significant differences between the two vendors for edge tear, tensile, or porosity. Calcium carbonate levels averaged 27% for 10-703 paper and 33% for 10-705 paper. Defect rates for cigarettes made with the Kimberly-Clark paper were significantly lower than control cigarettes made with Ecusta paper. Machine downtime for paper breaks was lower and less frequent for Kimberly-Clark paper than for Ecusta paper. Maker operators detected no difference between the Kimberly-Clark and the Ecusta paper in terms of how the papers ran. Kimberly-Clark paper

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was equal to Ecusta paper for machinability and quality during this test and Bay 1 management agreed that there are no reason for Kimberly-Clark papers to be precluded from Bay 1.

Reduced Sidestream

Handsheets at a basis weight of 45 g/m², containing a mixed filler of 20% Multifex calcium carbonate and 10% commercial hydroxyapatite (one form of calcium phosphate) and sized with varying levels of monopotassium phosphate, were found to give sidestream reductions of 30-38% with reasonable static burn times. Requests have been submitted to prepare handsheets with higher levels of hydroxyapatite for evaluation.

Two papers of slightly different porosities and comparable calcium carbonate control papers were prepared this week at the University of Maine with the aqueous non-sol-gel material synthesized by the Chemical Research Division. The aqueous non-sol-gel material is a co-precipitated mixture of hydromagnesite and magnesium hydroxide.

Single port sidestream visibility data were also generated in preparation for the University of Maine trials with the aqueous non-sol-gel filler. Paper handsheets with Albacar, Multifex MM, or Microna 3 calcium carbonates in combination with the aqueous non-sol-gel material were designed to achieve about 70% sidestream reduction.

Banded Papers

Preliminary evaluations were conducted on batches of bleached aspen wood pulp, eucalyptus wood pulp and fine cut cellulose fiber that had been subjected to steam-explosion treatment at Virginia Tech. Steam explosion thoroughly disintegrated the wood pulp sheets, but apparently did not cause appreciable defibrillation at 230 p.s.i. Also, it was seen that increasing residence time in the steam-explosion gun caused some discoloration. Additional evaluations of these samples will be conducted with a drainage tester more sensitive to subtle differences in fiber characteristics. It is anticipated that similar tests will be repeated at Virginia Tech following installation of an upgraded boiler capable of accommodating pressures in excess of 400 p.s.i.

During the work at Virginia Tech it was learned that a U.S. tobacco company is commercially using steam explosion, presumably for the treatment of stems. Inquiries have been initiated to learn more about this matter.

Support Activities

The Fox Valley coater was tested with a different nozzle system and the pump from the pipe coater to apply ethanol on conventional paper. Tests for uniformity of application were conducted with solutions of CR2978 on regular and low sidestream papers. Samples from multiple places of the coating webs will be analyzed for both the new and old coater runs.

2020286802

PHILIP MORRIS U. S. A.
INTER-OFFICE CORRESPONDENCE
Richmond, Virginia

To: R.P. Heretick
From: S. Tafur
Subject: Paper Development Weekly Summary

Date: October 28, 1992

Wood Pulp Paper

Samples of wood pulp and flax papers are being analyzed for levels of sulfur, chlorine, and nitrogen. Control samples were run by Analytical Research to select an ion chromatography column suitable for S and Cl analyses; analyses of the test samples are in progress. The results for nitrogen analyses show a higher level of N in the flax paper than in any of the three wood pulp papers (a hardwood, a softwood, and a hardwood/softwood blend).

Reduced Sidestream

Sidestream visibility analyses were completed on a series of cigarettes made with U. Maine papers produced with different types of calcium carbonate and several KC Multifex MM calcium carbonate papers. Visibility reductions for papers with combination sizings of potassium citrate or succinate and MKP are about 50%. Substantial differences in 8-port static burn times are noted among the various calcium carbonates to offer a potential option for increased puff count. Subjective evaluation of comparable Multifex MM calcium carbonate papers made at the U. Maine or by Kimberly-Clark showed no preference for either paper with monopotassium phosphate as the additive. Higher reduction (55%) was achieved with a Multifex MM chalk paper of lower permeability (4 Coresta before sizing).

Handsheets prepared with two different types of fibrous calcium sulfate (U.S. Gypsum grades A-30 and H-45), each at 5 Coresta and sized with monopotassium phosphate, were submitted for preparation of handmade cigarettes. These handmade cigarettes will be used to evaluate sidestream visibility and ash characteristics.

Banded Papers

Analyses of propyl paraben as an indicator for Avicel were completed on samples of Grade 137-1 cigarette paper printed with three levels of Avicel in 6.5mm bands at target levels of 6.2%, 4.7%, and 3.0%. Each bobbin was sampled at the outside of the bobbin and at 50, 400, 800, 1200, 1600, and 2100 meters to determine variation of application level within bobbins. Avicel levels at the outside of the bobbins measured 6.3%, 4.1%, and 3.0%, respectively. Samples from the bobbin with a 6.2% target in the bands averaged 5.4% with the 50-meter sample being low (3.5%) and the next three being somewhat low at about 5.3%. Samples from the 4.7% target bobbin were very consistent, averaging 4.4%, as were the variability samples from the bobbin with a 3.0% target (averaging 2.8%). Larger sheets have also been received

2020286803

For both cigarette sets, the statistics agreed very well among all three data sets. The unit in CTSD has previously been used for selections of all the specification study cigarettes.

A 1% solution of CR-2978 in ethanol was applied to nonporous paper of conventional weight for Cigarette Development. The coating work was done on the old pipe coater pending analytical results from coating uniformity trials on the Fox Valley coater.

cc: S. Baldwin N. Gautam
 G. Bokelman B. Geiszler
 M. Cruise B. Goodman
 B. Floyd

440898-070

for testing of variability in the bands across the web. Within-band permeability measurements are also in progress.

Laboratory procedures are under development for the evaluation of banded cigarette wrappers. Methods are under development for the determination of the paper permeability within the region of the band. Other methods will be developed for determining basis weight and uniformity within the banded region using the Ambertec Formation Tester scheduled to arrive next month. A method was also developed by the Analytical Research Division to determine the level of carboxymethylcellulose (CMC) in the powdered Avicel Cl-611.

Sample sheets of banded papers were provided by Kimberly-Clark which showed significant improvement over previous papers in terms of wrinkling. The printed papers were moistened and re-dried to remove the wrinkles. There was no distortion or spreading of the bands. Propyl paraben tracer analyses will be obtained for both banded and unbanded regions.. Within-band permeability measurements are also in progress.

Cast Leaf

The potential of the steam-explosion gun at Virginia Tech to be used for the processing of tobacco materials was discussed with members of the Cast Leaf project. Work conducted previously at PM suggested that steam-explosion might be capable of releasing natural tobacco binder in a cost effective manner. It appears that the facility at Virginia Tech may be more appropriate and less costly for conducting a large scale cast leaf study than a pilot plant that had been tentatively scheduled at the Herty Corporation.

Tipping Papers

A meeting was held with representatives of Purchasing, Hermetite, and Thiele-Engdahl, our cork ink supplier, to finalize ink weight specifications for cork-on-white tippings printed with low silicate inks. The initial cork ink weight target had been set at 3.6 g/m^2 in the cork zone for the low silicate inks, substantially lower than the 5.1 g/m^2 target for some of our tippings with the previous inks. Based on several months of successful operating performance, the cork ink weight specification has been adjusted downward to 3.4 g/m^2 for the low silicate inks.

Thiele-Engdahl discussed a new ink formula which is intended to address several PM concerns about the ink plasticizer, surface friction, and pigment cost. Purchasing Technical Services has submitted the proposed ink formulation to Materials Evaluation for review.

Support Activities

The automatic rod weight classifier recently transferred to Cigarette Technology was compared to an identical unit in CTSD. Two sets of cigarettes with very different weights were each run on our instrument and on the one in CTSD, and then again on our instrument.

2020286804

PHILIP MORRIS U. S. A.

INTER-OFFICE CORRESPONDENCE

Richmond, Virginia

To: R.P. Heretick
From: S. Tafur
Subject: Paper Development Weekly Summary

Date: October 28, 1992

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2020286805

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2020286806

PHILIP MORRIS U. S. A.
INTER-OFFICE CORRESPONDENCE
Richmond, Virginia

Wood Pulp Papers

Analytical data from the pyrolysis of wood pulps and papers were reviewed with representatives of National Renewable Energy Laboratories. Based on prior experience in the pyrolysis of various biomass components, Dr. Robert Evans identified mass spectral peaks associated with the pyrolysis of xylans and lignins for further evaluation by Philip Morris workers. The mass spectral data generated to date comparing flax and wood pulp papers were reassessed to determine whether or not the differences observed are related to the pyrolytic products of these key components. Chemical analyses performed earlier on a variety of hardwood and softwood pulps and on flax pulps showed differences in the amount of xylans present in the wood pulps versus flax pulp. GC-MS results for the pyrolysis of wood and flax papers were analyzed for two particular mass fragments that are characteristic of xylan and lignin pyrolysis products. The wood paper yielded a much larger peak for the xylan product than the flax paper, as expected from the hemicellulose compositions of the pulps. Chemical analysis of wood pulp and flax pulp papers are in progress at the University of Maine.

Initial pyrolysis GC-mass spectral results of flax and wood pulp papers also indicate the presence of sulfur compounds in the pyrolyzate of wood pulp papers. These compounds were not detected in the pyrolyzate of flax papers. These compounds appear to arise from sulfonated lignin compounds present in the wood pulp. While this information is preliminary, these data indicate the need to investigate sulfur-free pulping processes. The first pulp samples have been prepared at the University of Maine by the soda-anthraquinone and soda-oxygen pulping processes. After subjecting these samples to a chlorine dioxide bleaching sequence, they will be shipped to Philip Morris for analysis.

The performance of wood pulp papers at Cabarrus has been monitored for the last three months. Because Kimberly-Clark uses only one source of softwood (that produced by K-C's Terrace Bay Mill), the evaluation of Kimberly-Clark's wood pulp papers on Cabarrus' J row was recommended as a follow-up study after earlier complaints about machining problems. Although the earlier problems were related to blend rather than paper, further investigation into the recurring factory complaints about wood pulp papers seemed warranted. As reported by Cabarrus QA personnel, the K-C wood pulp papers ran better than the Ecusta papers. Ecusta, however, after evaluating process monitoring data at the request of PM, made some process changes which appear to have improved the performance of their wood pulp papers.

Source: <https://www.industrydocuments.ucsf.edu/docs/qkpk0000>

Ecusta has indicated that the changes made were relatively minor. The performance of wood pulp papers in our factories will continue to be monitored.

Two experimental wood pulp papers were made in a mill trial at Kimberly-Clark in late August. One sheet contains 100% hardwood as the fiber component; the other sheet, 100% softwood. Both papers were made with 30% calcium carbonate filler. Cigarettes were made for analytical and subjective smoking evaluations against flax and standard wood pulp paper controls. Descriptive Panel evaluations were completed for three Marlboro KS models to assess a 100% hardwood and a 100% softwood paper relative to the flax control paper. Both wood pulp models received negative attribute ratings relative to the flax control model. In a comparison of the two wood pulp models, no preference was found for either the hardwood or the softwood model.

Cigarette Paper Specifications

Analytical evaluation was completed on samples of DeMauduit 10-705-A cigarette paper made to targets of 26% and 30% chalk. The papers were analyzed to contain 25.9% and 28.9% chalk, respectively. Marlboro KS cigarettes made with these papers were selected for weight, ventilation, and RTD and smoked analytically in CTSD and QA. In both cases, cigarettes with the higher chalk paper delivered 0.5mg less tar and had a slightly lower puff count average than cigarettes with lower chalk paper. The impact of calcium carbonate on tar delivery for full flavor brands seems to be well established. The standard deviation was smaller for the selected cigarettes at the 30% chalk level (.42 versus .60 at 26% chalk). This observation was made in earlier evaluations as well, but those numbers are not significantly different from each other based on the small sample population.

Machinability trials were run at the Manufacturing Center using Kimberly-Clark cigarette papers ranging in tensile strength from about 0.05 to 0.13 kg/mm width. Three bobbins each of seven different types of paper were scheduled to be run on a Protos maker at 10,000 cigarettes per minute. As expected, some difficulty was encountered in running the papers of lower tensile strengths (.05 to .06 kg/mm). One box of 4,000 cigarettes was obtained for each successfully run bobbin for quality inspections. Samples of paper from each bobbin will be evaluated for tensile strength, elongation, chalk content, porosity, basis weight, and citrate level. Further evaluation of the results is in progress.

A model relating the FTC tar delivery and puff count of full flavor, low tar, and ultra low tar cigarette designs to four paper parameters -- permeability, citrate level, calcium carbonate content, and basis weight -- was developed by the Applied Statistics group. The model will be used to develop paper specifications for a minimum number of papers to replace the six grades currently used.

2020286809

Banded Papers

Laboratory procedures are under development for the evaluation of banded cigarette wrappers. Methods are under development for the determination of the paper permeability within the region of the band. Other methods will be developed for determining basis weight and uniformity within the banded region using the Ambertec Formation Tester scheduled to arrive next month. *A method was also developed by the Analytical Research Division to determine the level of carboxymethylcellulose (cmc) in the powder.* Avicel CL-611.

For the measurement of within-band permeability, a modified Greiner instrument has been developed. A modified test clamp with a 4 mm by 16 mm test area was fabricated for the Greiner instrument to facilitate measuring the permeability within coated bands. In an initial assessment of the new clamp, the time for 50 ml of air to flow through a coated band was found to be about ten times as long as for the uncoated paper. Calibration of the instrument is in progress with a range of paper permeabilities. The precision of the measurements is also being determined.

Samples of cigarette paper printed with three levels of Avicel were submitted for analysis of propyl paraben to determine the uniformity of application level within bobbins. Avicel was printed on Grade 137-1 cigarette paper in 6.5mm bands at levels of 6.2%, 4.7%, and 3.0%. Each bobbin was sampled at 50, 400, 800, 1200, 1600, and 2100 meters. Within-band permeability measurements will be obtained on these samples, as well, once the new method has been validated.

Further analytical needs for banded papers were reviewed with the Analytical Research Division. A series of paper samples with different base paper permeability and different application levels of Avicel were provided for initial evaluations.

Based on the evaluation of cigarette prototypes prepared with banded papers with different application levels of Avicel, it appears that some control of the burn rate in the banded region can be achieved by varying the application level in the band. Only a limited number of prototypes have been prepared, so it should be noted that the process needs considerable refinement. The development work in this area is proceeding.

Batches of bleached aspen wood pulp, eucalyptus wood pulp and fine cut cellulose fiber were subjected to steam-explosion treatment at Virginia Tech. The conditions used were 200° C, 230 p.s.i., and 2.5 minutes residence time. A batch of aspen was also processed at a longer resonance time. The suitability of these materials for use on the moving orifice device will be evaluated this week. For now residence time can be varied, but 230 p.s.i. is the maximum feasible boiler pressure for the steam-explosion gun. In the next several months an upgraded boiler will be installed at Virginia Tech which should accommodate pressures in excess of 400 p.s.i.

2020286810

Reduced Sidestream

Calcium Carbonate Papers

Cigarettes were made in Semiworks with papers coated with potassium phosphate solutions buffered to a pH of 3. Cigarettes were also prepared from papers having a permeability of about four Coresta before coating and a 40 g/m² basis weight for the base sheet. The objective of these paper modifications is to improve sidestream reduction compared to those used for recent consumer research.

Magnesium Carbonate Papers

Aqueous non-sol-gel

Papers will be produced at the University of Maine next week utilizing the fifty pounds of aqueous non-sol-gel material prepared by the Chemical Research Division. The papers to be prepared will have a basis weight of 45 g/m², a filler composition of 15% of the hydromagnesite/brucite co-precipitated material along with 15% Multifex MM as a co-filler. The target porosity of one sheet will be 5 Coresta units. That of the second sheet will be 8 Coresta units. Control papers made with Multifex mm chalk will also be prepared with matching porosities as well as basis weight and total filler loading. A procedure for determination of calcium and magnesium in paper utilizing a dual EDTA titration will be used to monitor the filler levels as the papers are prepared.

SDB/cbw

| | | | |
|-----|-------------|-------------|----------------|
| cc: | C. Altizer | B. Ferguson | H. Lanzillotti |
| | G. Bokelman | P. Gauvin | J. Myracle |
| | T. Callaham | B. Geiszler | K. Newman |
| | R. Cox | B. Goodman | J. Seeman |
| | R. Comes | H. Grubbs | H. Spielberg |
| | M. Cruise | B. Handy | S. Tafur |
| | C. Ellis | R. Heretick | J. Whidby |
| | B. Fenner | C. Lilly | |

2020286811

6/24/92

Paper THz

Low SS

A. Iron Va Sling

100 mm .77 .03

.84 n=3 .02

MCP Jon Fletcher

Blend + Flavour

20% RSA 45g basis wt 7.5

④ KHcetrati Citric acid sign

Sue : Longer ST

Aqueous Oal gel

4 requests Hand sheets
available. 8 cists for

Synthetic magnesite. 90 stock 180 stock

90 255 sec

Still slow draining

Vanillin release agent made 5% + 10%
level

Geoff Chan is taking care of NMR
450 temp response
SS aroma evaluation.

2020286812

β cyclodextrin; 1-4 C
lost under drying paper making
little in the paper.

~~alpha~~ / ~~beta~~ / ~~gamma~~ Cyclic analogs to mimic the HCA
release mechanism

E. Tomorrow bands paper:

- M.O. device

July 13 w/ Group

F. Tipping Printing w/ Solvent based ink.

G. ~~Q.~~ Lines printed acceptably

1. w/ flex anelges

SW / F

Anelges to

Tens paperfing pulps

Higher gases release Acetic acid & other
acidic compounds

After Shutdown week July 20

2020286813

6/25 Sidestream Irritation

Meeting w/ Ted

① Model System Screening



Analytical work in Europe:

Subjectives in Europe too.

Don & J. Charles

Chems Research Reactor work is progressing

Design of Materials

on

SS Components

Sidestream Chamber a duplication

~~Product Development Work~~

~~May Carbonate~~ Scale \$100,000

Reacheted: Product Development

~~3rd qtr~~ : Make 50 lbs

Focus Groups

6/25/91



~~Double-cut cellulose~~



from Agarolon



Hopewell

You refining trials for moving
— — orifice device

2020286814

6/26/92 Jim's STAFF mts

Mike Roan performance magnet program

WED 2:00 PM

SEVILLE - free standing mental to be discount 0

Sue + Wed; Product mts.

* MUL ; Campbell wanted 4th QTR natl intro but delayed till
Mallboro adventure team to promote. 3×10^9 cigs next year.

RED EXPRESS

5 PACK - AUGUST

Va Slims new graphics complete logo type to change.
UHTs changes to be less.

Metallize polypropylene for wrap ? Environmental
concerns.

Not August 6

6/29/92

Bill's comments only to try the papers on hand
from the vendors not to ~~handout~~ ^{make} pick out ; some
Review pulp analyses + design ; ~~some~~ [⊗] Selections made
Nemicellulose composition : 8% softwoods

→

> 50% Hardwood

Bob to review

~~Pulps already~~
[⊗] ~~make~~

2020286815

Pete

Salary Continuation - based on years of service
will move him into net & keep Actra

If retire & do long

Dec 1st convert

but have to take lump sum payment
instead convert

DPS would not get it this year

by adding salary continuation

Age 65 w/ 15 yrs service

Don't give to do package far ahead of time.

WON

④ If she takes a lump sum payment

she can keep it as a Dec 1st lump sum

Can

④ Retires Dec 1 w/ lump sum payment

get ④ Actra + DPS

④ Retires Dec 1 w/ lump sum payment

get ④ Actra + DPS

Later will there be any diff in lump sum
more taxes for refund.

2020286816

7/1/92

Low SS vs Pol / Consumer Testing notes

Jeletma

Low Sidestream

Circumference 24.0 / 24.8

Subjective Deficit

King Size - No ^{plan} Sidestream odor or decrease
but still w

3rd wk of August for 1:1 focus group

No Pol's 24.8

Deficit on 23 ~ that on 24.8

24/83 why do 24.8

Test benefits on model 24.8 to 24.0
very close to

24.8 Ambrosia II models were equivalent

New flavor + VSlims blends.

Not happy

Issue

1. Paper (PC)

2. Flavor

3. Level of 2778

Amt delivered to low SS

What this level is necessary

42 g/m² paper or cl

2020286817

7/7/92 Richmond Panel

25g 41g 52g paper

cr 2978 cr 2978

100μt AT 150

Subliminal

11 μs/cig on LSS

2 papers 42 + 52g w/ Va Slims Filter
+ AC?

Control Mild

42g hard to draw than 52

sl. throat irritation

42g little tobacco taste

52 Harsher, Shatter

54% reduction

Control Tar 8.8 8.3 8.5

PC 10.2 8.7 8.9

1 puff less than control
more

42 preferred over

Howard 42 better mouth coating

42 closer / ha

2020286818

Control most consistent

not as full

42 closest ; low input

52 harsher

42 little tobacco taste

paper taste chalky

42 closer less tobacco taste

42 dry chalky

52 harsh

42 better than 52 ~~41 + 51~~

- 42 ~~more 21~~ ~~less 21~~

dry with hardness

42 preferred, not ~~most~~

42 w/ ~~or~~ sufficient liquid

42 so ~~more~~ ~~21 + 21~~

w/ ~~30~~ ~~30~~ this is ~~more~~

Subliminal level - sl. sweet + salivary

sl. throat harsh

150 Vanilla aroma ~~8~~ - all poc modes

2020286819

2 Level Sienna w/ Park
conventional + 2ss

Mask on 0₂ set
8:30

H H H D

N N artif. keep

sl few

Tom - Don't think

ss pleasant

Balanced

N1 →

N3 + N4

handmade scale

for 4.5 subjective

85 panel N2 vs 4/9 -

Coresta difference

(X) N2 slower burning

Mark, Sue, Gordon

MATRIX ;

Study n

Parathy

V3 + V5

models

2 check

2 phosphate

| |
|----|
| 8 |
| 10 |
| 12 |

Recoated

4

C₆ + C₇, K, Fe₂O₃

8 vs 10°

2020286820

2020286821

20% L
july 2021

EC A
Soybean oil
descant product

H_2O culture fluid
EC A or MP more difficult
Elaic more
water

white like
dye = weak colourants

dye MW HAC

EC-MS strong sulphur colour

Citrate/Citric Acid SBT 8.9 MW

D. Palino

tinctor D. Palino after final form for

ultrafine

10-0624 paper 200 mesh

ultrafine

base wet

fractionation going to base of the monomer

Clift
about

ICMP

patent

Filter +
Flavor

N2 from

P. C. \rightarrow N3

Va Sline modelling

Concrete Modeling

July 16 Op M5

Check to Dick

Gloria

PDN Paper Festivity - memo next week

Goldone to R&A check K3 cipher / Cipher card

longer SBT 8.8

Dick 8.8

2020286822

Houghton Mtg
29th New product planning Comm

David B Suter

Darral

Good Houghton Renter

New Product Bus. Plan

Review feasibility

Concept review

Cross Funct. teams

Proj Teams: Proc - Concept Study

Production Request

On-line system? on a MAC
meeting monthly

Danger

29th OMC meeting Decisions

Op. Strategy

Priorities Renter + Hunker

Conduct To be culture

Report card on ~~proced w/~~

*With these
more*
Commitments \rightarrow microstructural w/ customer focus

Base - MACRO structure

Diane O. + L. Wexler facilitate Base work
one minute to Campbell

BANE

Consultants + cultural change

strategic review

Duncan out

Macro issues by BANE lot

2020286823

Juanita Brown

Weyler + Others

July 15 + Aug 20 next meeting

micro cultural change

How successful has Sales reorganization

Decision making has moved down

+ authority

Move Accountability down into organization.

Length of time - How many more consultants will be

Further head count reduction in S3

Neuchatel + I

John Bane interviewed NY

Operations March April

Lack of teamwork

Decisions not timely + quality of decision

Planning poor + speed of decision making

Team work

Other factors

head count reductions

Culture + Restructuring

International USA

My Services Bill Moore

Knowledge

2020286824

Better quicker decision - faster + more effective

Church Culture

Best time count : the

My

more accurate time estimation

How many accumulated things - would give

longer time

success in this. But us

Performance might not be

Computer + how it works + this

150 times less + 150 seconds extra

difference

But it is a possibility if it works

thus is a place for future research

At is possible

outstanding more accurate

Re-evaluation on how

to use it

312 times also in speech

7/8/92

Richmond Panel

LSS

53 g/m²

41 g/m² paper w/ Vanilla hand

* Comments:

LSS aroma pleasing.

C LSS w/o flavor astringent

w/ 150 smoother, sweet note

C ~~less dry~~

Blank smooth C, harsh

rod aroma

(X) no diff between blank and test

C dry, astringent; ~~thin~~ ^{m coating}

T Smoother, sweeter, ^{not} floral

Saliv

less al throat harsh

Subliminal

2020286826

7/8/92 Low SS - OK Charcoal [®] filter 

Lack delivery miles : filter design
allow materials to age.

52 no 42 g/m² run this week & evaluate
next week. Combines in Louisville

Export a charcoal filter to Japan. . . Combined
10-20⁴/1000

Ty - Tobacco Needs :

KAT meeting : review with group before now.

FRIDAY 10:00 AM have questions ready Monday.

Miles will continue aquisition strategy 

Headcount is not the objective.

Operational Plans later.

Reviewed objectives.

KAT as Cross-functional teams are
a consequence

Miscommunication of expectations.

Campbell had Canada & Australia operations.

Bob Maher - Product Dev Process

2020286827

Database

Send Change file Mullen 7/13

Discourant blend to be unified
Off shore forces to be added back.

POC Charts Mad Salmon mental
File front

15 → 16 tar

Spec's Coate Fin:

~~HTTSO on KC paper~~
w/
for D-10
Equipment - Check Agua and Kojane

Ken

① 3 conf. no

UV wets Dev Coating

Defer nonwovens

2020286828

strip Applicator unit

PA-8 Equipment
MOULUS
Specs

Filtrene

COMBINERS etc

conv LSS paper Cist

Ceramic tube

LSS program - if \oplus consumer evaluation
development

2 step paper in house

N2 \times
N3

Machine made only get some

Judy - tippins

Paper Technology mtg

\rightarrow Charcoal oil for modules

Va Slims

#4 #2 Marlboro filter

Affluent #2 - composition =

Gordon - Filtered flavor work : Screening of filter
Injection Technique.

Va Slims

Chem Research

Scale-up in house

Scale-up of Aqueous Sal-gel = 50 lbs ^{now}

Contract awaiting - Com

\rightarrow Still optimizing

2020286829

④④ Aqueous Sal-gel - Drainage testing
Major optimization



Base ppt

Drainage:

Porosity 6-8 Coresta

9:00 AM

John - ANALYTICAL RESULTS on Rikombolus

~~@@~~

SBT

Final tests on 8-Port Coresta - out in early
Bringing up 8 port, August.

E. Project Tomorrow

Wetty - 20th → Aug 3

Doubly-cut cellulose Rocky Foster.

Moving Oifice 2-3 g/m² w/ Avial
w/ CMC ~ 2%

F. Tipping

1. Coal Drop - ~~78~~

lip ~~④~~ Lacquer on skirt

Machinability testing

+ gluability - 014 ~~14~~ ^{band} Probins

2. ^{H2O} Lip release - Cigto made last
week

— Lip Release Panel Test by ~~@@~~
Navin's panel

2020286830

(L) Wood Pulp

Flax is more variable than WP by most analyses.

J. Lyons-Hart - Evolved Gas Analyses.
EGT

A lot CH_3 in condensate

7.5% O₂ in N₂

Slight differences in WP vs FP under controlled combustion

JP WP

Flavor analysis

TC-MS - WP vs FP

Descriptions

all calcite

Low Mwt Acid - HAc

Sterling Cigs

Papers from cigs made last fall - Marlboro cigs

M.Lts

H. Paper Specs →

1.

2. PDM Paper Results - Ernie back next

week

May rev.

2020286831

Julie Paper + Low SS meeting

7/1/92

10 1
135

Evaluate Ambrosin - Paper

MCP result

No - few charcoal flicks

④ ⑤ ⑥

Subjectively Close

⑦ ⑧ ⑨

Blend tobacco taste

60 g paper there was some
blend work

Mainstream : effect

⑩ ⑪

Waves removed.

Yerit Ultima

⑫ ⑬

2020286832

STAFF MTG

7/10/92

Sept 1 target

- Marlboro Blend Change - need POL data
12 - 13% ET

mid July - off shore changes

Tow change
↳ what change
POL's to go out end of July

- Ambrosia (models going out)
 - May use fiets to evaluate the concept

Evaluate on 42 + 52 g/m²

Also look at 2 step

Look at possible alternatives

- DOL's end of July - As scheduled;
notes - status

Chesterfield Industrial Park
Combining capability will be

- American Filtrona

Joe Griffin - Floor coverings an issue
mtg. Am Filtrona Wed 7/15

- RX + wider mtgs - cross functional team 9/15

Packaging issues to be resolved.

- Houghton mtg.

Strategic 1.5 2045s to Houghton

Presentation 8/17 11:30

- 93 Operational Plans in what format?

OSHA in MON & TUES

2020286833

Emergency #'s on phones ³⁰⁰⁰

④ Job Safe Procedures in Laboratory

Chemicals List for labs

Sample Staging

8 Port instrument Barriers to ceiling
wide mouthpiece ~~wall~~

Barriers to check end of 4th gr

Physical removal justification

2/15

DICK

8 port into other lab.

port x port profiles

Robotic + manual

TPM + H₂O

Susan Hutchison - where will they be

Mark - Cruise - Review

DICK JONES 3:30 PM

④ Teams to

Gordon - July 20-24 vacation

Bill to do winter

3:30 Lab walk through

2020286834

Jack Stinler A → I

Detailed plan

Navin - cigs to be made next week
proposals passes method

Jeff

POL's + question
time frame

Bill WP papers KC - making nice
add to agenda.

CS data back on MLTs

Ultra Lts regression

Part by part TPM Nic + H_2O ;

~~Final report electronically~~ ~~TPM: electronically~~

2020286835

Page:

Residual ash

Some basic cont

Static burn characteristic may change characteristic

Sample out

H₂O proper

Puff-by-puffs sample

W. H. W. H. W. H.

pH 7.0 pump 1 of 5.8 hefne
2 of pump 75 ml H₂O
24 hrs for

gent put 9.6 sun 4/1.

KC papers 2 9 paper

Central

Screening methods

2020286836

Subjectively, w/ charcoal filter attribute.

Cleaner, less irritating, less mouth coating.
still need

Merit 3 mg - 2 POL's this month. Some ~~metal~~
inclusion in blend

Aftermarket w/ improved solubility + better tasting still in
Merit family. Bass AC plus 38% ET
+ inc Burley spry to keep same level as Marlboro.

LSS Need something to offset dryness + mouth coating.

Barbara M

Web filter some difficulty w/ filter RTD

Semiworks combined; AFC made component.

Porosity does not affect tar in ACD

~~Gastritis off taste w/ PM ~~works~~~~

Howard ~~with~~

Any PC
w/ ~~problem~~

6 mg Marlboro on blend

Close
POL on 16th

6 mg

Red X Issues - tipping parameters

2.3 mm length FT

w/ its mc tipping set to 46
FOCUS group

2 gold rings, longer on the lights.

2020286837

Locating to cover junction
Artwork will affect deadlines

2 prices 40% off?
\$20 / 1000

3 days to make + approve 8/3 - 8/18
Ind. Equipment not limit, w/ Analytical
info on artwork 7.7 - 8.0 PC
TPP is issue not 2.0 TPP
can commercialize 2nd qtr
Production 1st qtr.

2 Share Brand

C.A - Make the real product 1st.

Hold out for LTS + do when materials
available.

Jim - quantities may change from Ad Pack \rightarrow Cartons.

C.A - include drop dead date ~~not~~ in Scheduler
after which can't change.

Melissa - no ~~MONADIC~~ PO's

Seville Discuss how to approach. Discount mentioned
→

Alpine - need a cost tipping

Melissa

to discuss discount smokers.

100 mm hts + FF

Jim Kool as target - what minor changes
would be indicated

⑧ Mtg w/ Dick & Jims

7/13/92 Paper Group

150 vacancies in ~~92 OB~~ positions not filled.

Operations was almost half-way there

* 11% compound GROWTH

Dick
Jones

Calcium C

RANGE

MARK CRUISE

Across the web variation is real.

All parameters showed the same trend; i.e., there was variation across web - (Front to Back)

.24 after correcting

55% of variation

Range - 1 Coresta across web

Residual

⑧

Samples taken WEDNESDAY to B. Hardy

⑧

Colorimetric

NaOH

CD

MD

OVERALL

10.8 - 13

MEAN

11.97

SD

.53

How is MCP APPLIED

ACROSS WEB

2020286839

7/14/92

KE Meeting

Equipment problems kept single wrap
to new next

Ernie : — Machine problems w/ inconsistency
Running on order | machine

Batch - made rigs w/ paper - no anodes

7/16

Manufacture

8/3/92 - 4 pullets

8/10/92 - 4 pullets

Free to modify order to come from

#14

#14

Smoke + visibility

Six Status :

More - conventional

More than 50% reduction

Scientific results, phosphate reuse
were slower

2020286840

Suspensions Higher Sheet into size press

ramp drying

flooding bath - sides of the ship

Should become standard process

conditions.

Analytical testing round robin

w/ Mary Ann Staunton

V3 - 10% MCP

Samples supplied

4" wide

V3

078 + 067

Budgetary matter : KC better
correlation with

2. High chalk paper wants to run all

- Karen - different grades

C Bart to make correct

QA - machine X-Ray unit

1 month in QA

2020286841

Mark Cruise MCP + porosity variation

Bart

Slitter set is stacked as a column
With Bottom straightener - pallets :
Brues

the groups ≈ 5

2 slitter sets + front + back rail

Calcium carbonate arranged also

Porosity measurement -

Biggest variation in Bobbin

3 & 4 bobbins close to end casting lower
#16 bobbins seemed atypical for all parameters

55% of variance

Slitter set

not at steady state

Machines are set up for

part

\rightarrow compression outside \rightarrow inside
Various places wrap this does have

2020286842

Meterage

MKP

at 32 points

Inside

Both sides are normally flooded.

Craig Witman →

Front to back variation

Higher MKP w/ higher porosity.

Chalk variation

Porosity variation w/ in bobbin.

1" = 25.4 mm 3/4" inch

Steady state condition

Uniformity

2020286843

Superskins - what is a long run.

10-06-24 2 drop

Any need for further evaluation
on

3. a) Impact of increased Check level:
lower & higher Check level 26 to 30%
5 mg decrease at higher

Total basis not constant.

renovation &
formation &
cost of fresh-up
Higher cost on percentage.

In another month

4. Wood price papers

a. Wood Analyser

2020286844

No you run a close yield
before

% Close = Close - 5 manner

% Cellulose = Glucan - $\frac{1}{3}$ mannan

Genco

Directed toward baseline understanding of

Plan to look at different sheet formulation

80% HW

20% SW same HW + SW source.

33 Coresta sheet Control 80:20

100%

50:50

~~100%~~
~~80~~
SW: HW

50% flex 25 HW 25 SW

Regen of pulp

→ J. Lyons Kart

Specific Handsheet formulations.

Early August; Cost estimates

Add onto 80-20 add to
std. wood.

28% Chalk 27.0 or 27.25

33 Coresta

.6% citrate

2020286845

80.20

HW: SW

~~to test~~

Ratio is

fairly constant

80% HW

20% Flax

flax SW in past

5. Cellulose

- ② Scheduled to be made this week
- ② Modifying the method.

Consensus on fabric

Test. date

Granite rail

wrinkling in issues

Name: Bobbins of the board up below

size @ 2000 gts/min

Sample made

Local drop-SP test. will also be done

2020286846

Smoke coils

1-5

Communicate

Issues related to
partner

b. Results from next meeting

Get back on machine

Printing on coated sides.

Draw down Tape

Problem w/ Gold band ink.

Dry w/ std inks

Hold tip release to one side of the sheet.

Cork on white used to be a problem.

b. Economy base sheet for Cork-on-white

- Art. 1 to use cork-on-white for each

7. Date of next meeting

application.

August 13. 9:00 AM

(~~KK~~) KC has a commercial polypropylene
filter - Dimension

No time on mfg floor

KC ran some simple filters

Group of plugs were sent to Ken.

They made plugs + tipped them
developed hot melt.

Done indep. to Par.

2020286847

Confidentiality:

Laboratory evaluation of HPC Avicel

Room until August 2.

4th floor of Education wing

Guarantee a table & wall socket

Bennie Good

August 17th John will

get a room

Refreshments

2 in seminars

Would it not benefit the overall
patent & proprietary situation to have a
technical alliance.

(Collaborative Strategy)

Joint Venture on CigPapers & Bands.

Total Partnership, Economic and technical
Strategic Partnership

2020286848

→ June 91

100 % Experiments

Use a higher quality pulp

7/20/92

FILTER MEETING

Cellulose Derivatives & Superabsorbents

| | |
|------------------------------------|-----------------------|
| 1. cmc - low subst. - fibrous | Alternative Fibers |
| 2. Aquasorb Acid / base | |
| 3. Cellulose Phosphate | |
| 4. Amine subst. Cellulose deriv. ? | |
| 5. Chitosan | |

SEALICE

Superabsorbents (wet)

Aquasorb - fibers or yarn (dry-laid)

Coatings on webs - NH_2cmc (fibers)

Miracle fruit - kills some taste

Chitin?

Superabsorbent - patent search

2020286849

Super absorbent

Expectations

Concern - Degree of change.

Sue - 3 fee

Concerns - limits to empowerment

④ need free review

Empowered
Define

Team work & lack of it

* It won't

Some project
Teams in same org.

Collaboration between groups.

Risk / Empower

Sue - Old culture

Na Sime

2020286850

Fear Issue

Technicians

Empowerment - authority to m

Communication - what is the

{ goal of our team }

{ what are the dead line }

⑧ Continuous Improvement

Open what is the vision

⑧ Vision - what is our vision

Blue Books, Review of Planning

circulate

Blue book

When

New culture Δ PA

Concern - How to implement

Open Communication

2020286851

How to create an environment
for open discussion & dissent.

Concerns

Jeff - degree to which Mgmt
takes us seriously.

Cultural

How committed is management
to cultural change

Empowerment & Accountability

Bill - No progress on - New culture.
lack of credibility + lack of
lip service by Mgmt.

Behavior

Communications -

Risk Taking

2020286852

Pete : Communications

united

* Empowerment / Risk Taking
→ Communication
Team work

Ground Rules

1. what we say will be forwarded anonymous confidentially.
→ ~~consensus~~ passed forward anonymously
- Maintain confidentiality within the group
- Everyone must participate
- Maintain time restrictions.

→ Respecting time frame

Process

Creating the
LDP - Culture No backsliding

① How committed is mgmt to culture change preoccupied
by restriction
Ensure communic.

② What are the limits to empowerment.
 { Accountability + Responsibility }

Financial Responsibility

2020286853

Expectations

For Empowerment has worked backward.
It is worse

Communication

- Get information & analysis
- Identify & winning region
- Region

Weekly info

- no
- Planned
- Actual

Planning

- Define our own vision & mission
- Alignment
- Initiatives of
- Refine Empowerment
- Communication
- Define expectations for ~~accountability~~
- Identify what we are doing well
- What & what is below expectation
- On to report
- Report bad news as soon as possible

2020286854

Report back notes

→ People Development →
↳ ~~Planning & Organization~~
↳ Seminars & continuing education
↳ Training & Seminars reinstated
rest of course

Decision Making

↳ what are limits - to empowerment

Participate in planning career paths

↳ Questions w/ in group
what are limitations on self-worth

2020286855

~~Speak~~ ~~4 day~~
~~After~~

Run samples
start Thursday

① ~~DAB4~~ (1626) ?
1479 ~~etc~~

1532 talk to Drew
about

② 1570, 1596, 1518

issue fee on 1393
Aug. 6
Office action -

③ 1466 / 1393

European application:

15 6 28 302
5/29/90
Defensive

1st Office action Aug 6
issue

④ new Office

2020286856

* Check w/ Ted Kraft abt silicate in WP as FDA issue.

Cellulose acetate tow \circ wood

7/21/92 Yntg w/ PED, PD abt LS/LD
LS/LD research desired.

Planned for this yr as Ambrosia
Mktg Rs. addres for Ra Shims
& the whole concept.

- Define best option VS
- Define potential in general.

Is it a benefit? init, LS, LD

How far do we need to go (all or 50%)

POL - global monadic to smasher grp.

* Sensory Cost and

* Unaided awareness

Call back to see who noticed.

What did they notice

V Shims Lts + another smol

in global panel but not Supplemental
MLts.

? ? Why cut down of Ra Shims research, since that
is the product?

Xingering order

2020286857

Extended smoking, but not a POC

large scale qualitative test
primary concern

Focus group

(mental deleted)

Is it worth pursuing further -
If response is a total yawn
it would be killed.

Last to go out on Fri 24th

DeNico will tie up panelists.

2nd wk of Sept on Go-NO GO

Penalty for cancelling the focus.

Reaction -

Expectation

Lifestyle, situation ; was it a benefit
cost/ benefit

Rel. importance

MODIFIED AD PACK

Aug 31st

2020286858

CONTROL 7/27
8/3 LSS/10 100 - nonmetal.

C/ 150/2978 CT

9% MCP 8.5

Charcoal on Reg

CT/CTw/Carbon

combined filter.

31% CaCO_3

.12 mg/ cigarette LSS

.2 mg CR2978/ Cowl.

.1 mg/ cigarette 150

49 stems, 40+

Reg Reg is 137. Reduce 1

9-11 8.5

2020286859

7/22/92 Paper Meeting:

Smoke Technology:

- ① Aging Study - update on RSSS; Machinability.

Analytical data on POC-models.

Semi-works models of UMaine magnesite.

Synthetic

Scale up - NY - a very 2-3% error.
Non-Sol-gel process \rightarrow 2 to 12 hr reactions.

Analytical data came in

Choice of only parameters \rightarrow
 drainage data \rightarrow \rightarrow
 composition

If we are given the goal

Synthesis:

① Meeting on RSS in early August

② Mtg on Banded Paper

F.

KC, Escata, TerraKosky ^{WB L rebs}

\rightarrow some finer flue up

no coal drop off problem

5 tcf cork-on-white has high inc not
higher tipping

2020286860

Bill - Jervoloski w/ other coating for tips
Can they replace day on Aug 20

Tipping machine for lacquer shift in action.

G. Wood Prep

J. Lyons Hart has samples. Pigments

Visit by Dr. Gerasa Aug 4-7-1971

Statistics - MUL - Part corrections

PDM studies - Begin tomorrow

- Bay 1 & Bay 2 (with vanillin)

mitigation

Box with weight will be sent

strength

target production is 20% no further

weight increase no problem

2020286861

new to the
industry, strong
market value

new to the market
industry - strong
market value



PACKAGING

6

Holograms :

Wrap may allow draw to price value

Could be a very cost effective way to drop draw

RJR Research

PET → Polyprop

feels consumers are eager for this

Laminated Cellophane

Packaging as an approach to offset draw to price value.

August 4 - Genco + Company

add to that list

Aug 10 - 11 SC

Yelisa ✓

Aug 3 - Low Side Stream Brainstorming session

LSS

ODOR

Page

Premier - ODOR - recurring theme

side stream

lingering (stale)

reduction in smoke ⇒ reduced taste

35 yr male - visible smoke

family concern.

eye irritation

2020286862



Report on prior Smoker Segmentation

Quantitative it is teach

Report

hard draw
weak taste
thinner

Summary

with POL's
include
mental

Chelsea - socially
weak

Horizon is still out Chelsea is not.

Size of Cig was an issue

Va Slims Brand Strategies

1991 largest drop

1992 → Rate of decline is slowing
~6% more stable

1992 → ^{lost} Convenience store

Reversal in curves in Cartons in Supermarket

Va Slims. lost young adult female
5% in young groups

Last 3 mo B+W + sub generic

Nielsen dropped every 6 months.

Misty is growing

Style Soiled 2 packing

1.1 points → these.

Bow 100%
100 mm

Promoting a lot. ~20%

Advertising

New Ads

Quantitative Research on Packaging

- it was preferred.

2020286863

RS is booklet pack
only

240

Low Odor / low Smoke 100 mm
Revolutionary

Might draw some males

Virginia Kings

~~240~~

3rd gtr 93

25+ for Low Odor Low Smoke

100 mm product...

Test Market in 92

24.0 100 mm
Marlboro Lts 85's

no menthol Focus grps
menthol in 1 on 1
V&L Lts menthol

Va Slims Current product

100's excluded.

Ad PACK is so important...
must have ads & packaging

Perceptual mapping

2020286864

7/24/92 DICK

* STAFF MTG

Tues 28th 1:00 PM Lecture Hall

Sales presentation B&H KS launch

Request 93-97 Capital Budget

Mon + Tues - Perform Mgmt Training

Jim

Next week DICK

3-4:00 PM Structural Changes - Houghton

Diversity Training / Awareness

One of the indicators for PA in diversity

PACKAGING

Strategies for sensory testing; Int. Op. Services

*To this
an issue
and up
for*
Gordon - Being assigned to a team
where he doesn't fit.

2020286865

Jeanette Lewis: in QA
Her case Fred was
read her a script.

5/15/87

Discussion w/ Dr. Houghton's

Interviews done Aug

Develop an

6 months from August - they will
have list

BANE:

Results - Oriented

Culture Change

RJR - 2nd generation

Raise Full margin \$2.50 / 1000. / Don't 67 → 84 / 1000 to compete

but Volume w/ Bristol

comp. w/ 1000 ~ 4th price tier w/

Report to
Retail Masters. ~~Display~~ Cigarette Areas

that was
an effort at to have the ~~display~~ own in %

to protect
full retail
or defend

with minimum

Report Card on retail distribution 54

Vision stand day 219.5 → 1.5

→ 1.5 → 1.5

2020286866

7/27/92

? Mgmt Performance

SABET



Time tables + meeting deadlines

Communication

(*) Good to explain expectations

Good to focus on

1. Identify the competencies

2.

++

Exemplary

+ ~~with~~

Positive

C

- Needs some development

-- Coued signif. effect
Business results.

Summarization

HD \rightarrow Productive can have some negative

MD \rightarrow Gets job done

UD \rightarrow job doesn't get done

2020286805

BI

→ Actions working on projections

Safety inspection

Qtrly planning mtg

| | STAFF mtg | Budget | In Basket | Overall |
|----|--------------|--------|--------------|---------|
| C | U m | M | U | MD |
| MA | M | M | H | MD |
| OA | - | - | (-) | UD |

Call Joyce S.

Lucky OA to make

2020286868

Conversation with Gordon

7/29/92

- ① ~~Review~~ on Magnaite Status report?
to write this greater part of yours.

Planned that to answer communication
we need to review

- ② Negotiating Contracts

Stat

2020286869

Communication with GOR

7/28/92

② Outside Contracts

- twice Negotiated contracts w/o clearing
with J. Schmidt, ex director -

on a sensitive issue. These actions
could have ^{serious} impact on the business
without discussion with director, ex director

Weyrhause - liaison or counsel
Steam explosion - Empowerment also requires
Accountable for actions

+ outcome. Take more caution - be more prudent

~~③ Strategic Report~~ ~~status~~ ? Utilize company
resources. Ask for
input.

Appleton project
is the best example

EDW

③ LSS - Other patent - Taken any
initiative on this issue. Other?

Gordon - New initiatives, ~~including~~ Blend - less basic

Productivity? minifiers - different factors.

Citric acid in Dope - showed movement?

Needs optimization

Ecasta test samples - charcoal w/ flavours
absorbed found on 1 side; charcoal
& enc. β -methyl valeric acid
released in burning. New blend.

2020286870

Matrix w/ 1/3

Bucks fuller is with paper.

Bill wood pulp paper
Precision mfg. Gene is
not
wood pulp plant

Did not plan to design a new paper
meeting with Dick in June.

and round - cutting with cliff etc -

No new pulp suggestion

Ratios with software / 4w - not new; not enough ac
ground negative implications from SW pg.

No attempt to draw on R&D resources or
perform a literature search.

in our discussion about please for
further evaluation - I feel you making
back -
feel to show more initiative
take more responsibility.

2020286871

wood pulp PAPERS : Get analyticals done.

To make papers in August To do research.

Requested to extend.

What can you do to accelerate that schedule.

What can you do to accelerate

Bill - Dr

Approximated by 4

discussed pulp analyses -

Higher lignin content for ~~the~~ wood.

John Madero - to look for ^{compounds} lignin.

John to start this week.

Pyrolysis of 2 papers - wood & FLAX

Pyrolysis of small quantities.

Higher wt. compounds than J. Lyons-Hert.

Phenolic type materials.

Dr.

2 weeks to determine

: Bob Evans

To meet w/ Dr. Genco : How ^{Pulp} analyses were done.

Hemicellulose components - lignin or Hemicellulose.

→ TGA. Jay to evaluate.

Literature

1 50:50 → Have we evaluated?
80:20

Morris sights made - J. P. L.

Old Ecusta - 2 new Ecusta.

2020286872

Bob Evans

100% SW or 80% SW

Higher SW

Dr. Genco meeting \rightarrow Aug. 4

Jim Lyons - Hart neither HW nor SW

Hardwood pulp - pulped and @

Softwood pulp -

Hemicellulose decomp region - is produced

w/ citrate + carbonate

Alkane-type groups \sim CH_2 - EGT

What is the info needed to

FLAX HANDSHEET 80/20 HW / SW Hsheet

HW additives w/o additives + CaCO_3

SW few differences

those on which KC

make cigs in Oct. make and smoke

make cigs it need to Panels smoke

2020286873

52:02

55:08

Need this priority

3 wks till

by Sept. 1st.

Concerns:

Asked about where
people are coming from

- ① Bill - That road blocks are being placed there. Not getting ^{right} support
make HW/SW papers
100% SW [80/20] control
100% HW

- ② A level playing field - we communicate honestly. How isn't there a level playing. Bill makes a proposal or recommendation.
- ③ Do not you have a performance..
Bill is an excellent grade 13 performer.

Bill:

Dick not being present for meetings

Dick's response to him - Schedule a meeting w/ Tim
Dick

06/19 D. Radulescu

2020286874

GORDON

Camera video tape w/ color image processor

board - textures & patterns.

\$25,000 Camera + microscope

hardware - w/ upgrade for ambient

\$5,000 Evaluations

Dick: Do we need forms filled out.

Calcium sulfate flocs + particulate.

ash calcification + need to cement

Agglomerated calcin carbonate



Gordon Review

low SS products may

EXTERNAL REQUIREMENT

- REPORT AUG 10 1993

- ETS - bigger factor in future.

No sidestream product required

Melissa -

Myracle

Dick -

Leyden

Op. Plans to Houghton -

Myracle - 1SS / 10

Tindall made extreme - ① lift fees decreasing
rate inc ;

2020286875

New Products

- The net sales ~ 1 billion

Over country rice patch. — a competitor

Nicotine to cigarettes

New Exec V. P. is 10th at Reynolds on 10th

Pharmaceutical - nicotine inhaler

B - b is cheaper;

Moving Office

111

مکالمہ نویسی کی تحریریں

3. داری تاریخ -

الطباطبائي

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

111

111

一〇九

卷之三

نَارِيَةٌ نَارِيَةٌ نَارِيَةٌ

2020286876

Low SS.

8/3/92

1. Low SS Research

My R&D + NY Proposal

Lingerie order. POL + call back
After 4 pieces

Addressing - amount of smoke.

Concept statement →

Unaided recognition.

Return info on focus group next week.

Jeff why only tested POL w/ call back
Large scale st

Alejandro Lopez was here

Models for evaluation

A Bldg used them

⊕ Magnesite paper Rich panel did not like them
(Models were made) compare to chalk.

Blend + flavor

Blend + flavor work

Blend + flavor.

⊕

EC - ion Ambrosia II ⇒ > 60% SS R&D

2020286877

① * Action ①

~~Side Merit~~

Low For High Flavor

Check on

Less ammonia / Bucks blend w/o AC

TEC →

⑧ Trichlor citrate indifferent

2. Action - What are differences?

Filter needs

GORDON + ARLINGTON → HEARN

Aqueous non-saline -

Can lower

Action is to scale-up

and

make-up

With Papers to make

⑧ (Memo)

2020286878

Raise - KC & mg containing materials.

Get lot to make papers

Ground Calcium :

Micr

Review calcium carbonate

Next week to Minerals trip

2 papers & a control

Control Milk

Non-Sol-gel

Review patent status

Jeff & Sherry

Review status of all SS

Prioritize

Asbestos-like

Fibrous

Toxicology - John

Acicular CaCl_3

All

2020286879

By

Spray dryers

Many alternative inorganics.

Review Review decisions

Calendaring as an approach - Navia

Pore size distribution Review this
by Naomi

8/4/92

Dr. Genco Saunders @ Battell

Clay - Clay condensation does

End group analysis

Al 23 Li LiCl LiClO₄

Kraft pulp - Na Sulfite. 2 Sulfite Li LiCl LiClO₄
found to lignin as epi sulfite

Caustic cook \Rightarrow condensation 23 Li LiCl LiClO₄

Flax 23 Li LiCl LiClO₄

2020286880

~~(X)~~ Sulfur free / Anhyd

Soda / Anthracene / CO_2 coke

Chlorine / O_2

A Sulfur free pulp

12 - 15,000

By October 1

Copy of Preping & bleaching

Leo Schlesinger Syracuse

Research Needs for Preping & Bleaching

Sulfur-free

HS^- episulfides form. Sulfur remains

1. Soda / CO_2 bleaching

2020286881

(X)

(*)

11% max $\pm 1.5\%$

9.5 Coresta

Gordon

Pick up

1393/1466 Turkey

* Response patent CaSO₄

KC - Trip

3.

Convert to farms
wordmark template

Operational Plans needed
current plans



Programs & Summary for Don't Leyden

Timing 12-13 August 2011 week 2

2020286882

Bill - Wood pulp plan

1. What about papers in August and October

2. Lignin Char

Did you have =

1. Production

69% 10-981A

10-981

Matrix to define 23.0 performance

missing analytics on neutral.

Blend + flavor work - Bucks blend.

Formulating Requests Bucks vs Va Slims

Bucks w/o AC

Some hold up on this - Jim P.

Cigs. made but not ^{up to air} here yet

Gordon - Handmade cigs on synthetic ray cart.

Aqueous Sol-gel's + mm } Smoked
non-Sol-gel NYP } Subjective
" " " VIP }

2020286883

12 liter

B2 d. J.P. NY Wed 8/12 1:00 PM
T-4 for 2 hrs.

D. POL models :

CR Have not received them

 Coresta machine smoking to be
done.

D. Newman -

Cigts made 1st 2nd weeks of July.

C Conference RM 9:00 AM FRIDAY

WOOD PAPERS

Bill - Ecusta wood pulp. 2 Samples.

Pfleuger has models.

Description terminology to be obtained.

Control is Ecusta flat

Thermal analysis - TGA of KC flat + WP

J. Navaraj - GC-MS analyses

J. Lyons-Hart - pyrolysis of Hand sheet
w/ 25% CrCO₃.

To review tomorrow 3:00 PM

2020286884

front wall 5/1/8

~~TIPPING PAPERS~~ :

1. Coal drop off - machine studies - Done yet?
Bill to check.

2. Water base lip release

TerroKaskey was poorest.

Drainage studies - NY only -
Mag carbonated
no significant effect

1. Sat - gel and 3. non gel

Operational Plans :

Bill Tipping at Hematite - difficulty
running low. Sizing up only 1000 ft
Buff ins - met w/ Hematite

High speed tipping for Parliament - 38 ft
38 ft uncalendared 236 u2 tipping

Closer to what P. has - trib won

2 pallets - to fest at Stockton St.

8000 ft - 8000 ft - 1000 ft

2020286885

8/6/92 Guest Meeting

Wayne Mc Cart
Technrical Coordinator

for each tobacco co.

Dr. Joe Herren.

1. List. Wrappers
Wood Pulp Papers

To coordinate all
Concerning technical efforts

Jobs to

Go into factories also

Plenty wrap, tipping

+ low SS.

Clemson - PhD Seghersius, Inst. Botanics

Nat'l products.

Low SS papers - Tipping, flaking

synthetic flavors.

causes dusting, problem.

wood

Only or dense

ULMA FAULT DETECTORS

500 detectors across the sheet

It on photo detectors. On all cist. machines

To pick up dark spots

Pulp spots

Not dirt on black spots - ulma - 033 - line

Flaky more dirt - slim

have equivalents

(X) WP spots w/ have 20 as many as flake
small spots

dirt holes larger dense

2020286886

defects - slitter breakage rate is better.
for w/p paper.

More dense spots: Red pop opens

Oily spots visual judges more spots
in flex papers.

Weak spots:

Specs

Tension, elongation w/p better..

In general run as well as flex paper
Bleed through of adhesives: on porous w/p
papers (50 Coresta)

Refining system - full capability:
refining to put in

Disc refining: making some pros

In place & operable.

Navin \rightarrow FORMATION TESTING
OF LINE

On-line monitor \rightarrow Specimen against
black background.

2020286887

Confident in your machine. I am not.

Built an off-line monitor
Cap. Request to build prototype on paper
machine.

To combine formation + opacity tester
before make.

Mark detector on #1 paper machine.

3 months

Monitors register lines

can do

Helps to keep machine uniformity

Dark / light back ground; Register line.

Newer Difference in appearance - no diff

Flat papers

more porous 75 Consta - NP paper
is better

B.M. → wood pulp

more porous

Uniformity

27 Consta : 200000 → 200000
TUD06478
33 Consta : 200000 → 200000
06479

Pulp: Hi prints SW / H2O
Cl₂ bleach
Gentoptex
pulp

2020286888

Cl_2
Molec ClO_2
Oxygen / enzyme O_2/O_3 delignification
process.

\otimes Pressures can do ClO_2 bleaching

Preliminary results

Printing papers; free free, Cl_2 -free products
Flax-like.

ClO_2 bleached pulps are no more expensive
Ecusta will move in that

Mark prototype direction.

Mfg operations in Europe.

TiO_2 mfg issue in Europe.

Sales to Europe in Common market

2. Calcium Carbonate - anticipation

URe Capital Budget for 4 ash gauge
would be approved

Decisions in October on capital budget

3. High sheet paper - 28 g paper

- Materials 28 g paper

30 bobbins shipped
to do machinability testing.

T0006492 ; Subject

only planning to do Merit
Ultima

2020286889

Bill Jameson

plus wrap - dusting. Glue bleed through

lot to last in filters.

Built up w/ time.

Dust probe was never brought. Dampener brought filter.

Joe - fibers to truck

mercerized pulp was contributing

fibrous portion

Binder: CMC

Change in of fill
Bleached fiber is major contribution

2 types of dust, not at eq. volume.

How would you address the problem?

minimize mercerized pulp

Modifying formulation

min mercerized fiber

Change pulp, formulation

CMC + Kyneme, dextrin

Dusting probe, solution added at

high flow

Sequential addition

Change in of fill

2020286890

Dilution rates.

Machine trials: varying ratios of cnc
& Kynar - improved fiber.
Complete by next wednesday.

more cnc

for tensile
seitter for plaz wrap
spread

board, rotating roll.

Further measurement help bleed thru.
Pore volume improved furnish
may pore volume

Parameter 2

Silicone off wick into sheet
large
prem. cnc

Novin - to follow up

out

Solve the problem using the same
components.

Ref. 28045. Get dusting under
control first.

2020286891

Coef. friction measurements

Smoothen surface
Reduce tension on frame (by plug maker)

Side lines + fiber orientation
On other difference:

- wire side out felt side has more contact w/ stationery
- Conf friction on wire side
vs felt side
- Reversed - could help

Tension measured SW

Change wire side vs. felt side.
against tipping.

Reversed a bottom

720.

Narrow wood at Prince - what other
pitch control.

Alt pitch control agent
=

INKS - INK numbers + supplier
Supplier

2020286892

Lark persons combining

Parliament base sheet for month price
Papers

1. German approved reference - cork tipping

Fe_2O_3 - cork tipping must finish other
w/ and w/o gold line

2. Abrasiveness

3. Massengill

Wayne McCarty - make a slurry w/ chrome
slide to test abrasiveness of the pigment.

④ German appr. Fe_2O_3 oxide Baer does abrasiveness.

30 pellets of problem - 44% more abrasive than
RCI printed truckload qualif run. 24 pellets

3 set of knives on that truck.

2nd time

tipping run

Competitors ~~problems~~ with only 1

Knife dulling rate test

Ecusta would reduce pigment level.

Tipping abrasiveness

2020286893

B:11 - how does this compare to
shades of knife traces

30136 .647
30033 .55 - knife dulling slopes
30701 .37

Painting did not contribute to abrasiveness.

Different cutting press for 136 white
Rear another truck load w/ reduced filler content.
Asked about other source of FeO₃
not currently specified.
→ Columbian

Zinc is the problem in most sources.

To prevent to repeat

Phase I - FeO₃ free plain cork: 20 parents
free free lead. would be OK.
Abrasive issue before next truck load. wash down
inventory
Phase

2. Mod.

30136 ! not paper contaminated on
Bot H Del. W.L + M Lts
reason for testing autoclaved

One 2 knife trucking - not back adhesive.

Abrasives problems - not on nets.

Plane wrap ~~did~~ not seal well against

26 000 plain wrap

Absorptivity & get more effects

on 1/26 w/ Finer Paint reduce paint.

2020286894

Modified tipping should fix this

may get 5 pallets

Bay 2, Bay 1 MC - Cabarrus.

Navin - Made tipping more absorbent refining sign
filter content.

3. Economy - white - Ti fine white tipping

Mnts 100's - Order a slitter set

to check

TiO₂ coal drop off; filter flares up.

Printed by Hematite Buena Vista.

Econ. ~~task~~ - TiO₂ to get it out of

36 g all chalk sheet 85.5 opacity.

Abs. 30436 w/ lower porosity

& no coal drop-off

Evaluate this.

2000 m. bobbin

Smoothness & contact L for tip release

Coef of friction & tip wear

absorbency Should machine well for
tip wear

11 machine off

Tipping

Economy cork - white base sheet w/ 2 layers

some cost savings - European customer

pallets w/ cork on white. Dropped price at

45

2020286895

white shirt - panel

32 g all check sheet

Economy coke inks

4. Latex coated tipper

comp to MTS picks flame up + cool
drop-off Getting smoke

Gives some tipper properties

extra inking no burnt

Much homework to do

higher machine speeds

plus pass at latex

no at printing

1-1½ yrs No incentive to switch

5. Base sheets for H2O base inks

work w/ ink suppliers for H2O base ink

Ecofur Pilot printing. Will work on that

Approved list at

50 number #

Eric - 033 run

ring it

After inks and inks - base inks

base inks and inks - base inks

to base inks and inks - base inks and inks

2020286896

8/7/92

Review cap. budget

Op. budgets due Aug 21st

+ 2nd revised std w/ this

Players

Forms - by Aug 31.

93 by August 21st.

Template on wordmac.

United way Aug 5. Complete by Aug 19

No Sam will be in Asia.

Fiduciary training : call

Dave Davies w/ legal Players in Canada.

Vantage w/ ^{the} wrap came in yesterday.

Doral - new fresh packaging

120 mn 23.0 Merit Ultima

Merit Ultima mental.

Make pack for Marlboro std.

comment Filter handles & natural vs synthetic filtration

ink.

8/7/92 QT method for

Tables

Dif. between

Colorimetric value std. analyze a
group of palets

if

A bias of a little less than.

2020286897

Agreement

Paul

to have Lip - clear

8/1/92

Hawes - #4000 CR 2978

LS

Melissa

(R) Operations Plan

Sm

Aroma modification

Smoke Technology

R - what assist w/ definition

Tomorrow Smoke

Side Stream

→ Nicotine transfer / Blend Components

P - Nic delivery

Solventane - Aroma - Sol + invitation

→ Assist with measure

Capture

Constra 8' post + 1' post

No functioning chamber

5' x 5' Board, Board

15' x 15' Board

2020286898

8/7/92

NAVIN's meeting w/ fiber group

Fibrids - Particle

Zeolites + Carbon fiber

Fibrids → If use

CA web w/

Prost fibers

Tencel

Sheet Strength

PM web w/ Cotton / Fibrids

Action: Handsheet - w/ Fibrids + get surface area

★ Handsheets on cotton + Eucalyptus

August :

Sept → October

Fibrids

Gouveneur

2020286899

Report - Albacon for Albacon 2/11/71

SP/18

1 model - existing 11% MKP + mixture M-10, 23% MKP

3 KC/6 MKP, 4 models

3 KS/6 MKP on Albacon, mixture 3, M-10 25

7.5 KS 4 models - Analytical Info

10% MKP 2 Models

MK + mixture

14 models

14 models

14 models

2 P.T.O. + Action - Sherry to Fall to Charlie

Yatrakis - Jeff + Sherry to Fall to George

Operational Plans

2 runs for CaCO_3 at KC_1 , 25 copies

3

1st 3

1 ton / ton

6 tons paper

2020286300

Take to Melissa about including ~~the~~

① Operational Plans & Budget
Reduced SS

Scale CaCO₃
→ 2 mill runs - KC early in 1st
* Product need → 70% reduced
one pc

Add new w/ Job

Magnesium

② Magnesite: machine made Agtst. magnesite
evaluate

1 additional paper at Maine.

Continue Ag Non Sol-gel 2nd runs

Finish So no Main - 4th after
Sizing ~~Aug~~ 10-Sept-93

High for free place to make a form
large initiate commercial
inquiries

4

Obtain Contract 1st 93
Begin request incata 2nd a

2020286901

"Sod-geel"

Final run 92'

Validate 3rd str 92

Select Venetian lot 92

Run 92 93

Stock after 93 W Maine
11th str Complete Evaluation
Cuts
8

CR 2978

3rd str
Reviewed Techne

New after str 92 Re

New CR 804
evaluation Make file
~~Hand sheets for selected~~
4 separate results on hand made
with

2020286902

Assess experimental result
selects candidates for further
scale-up.

2nd get cigs made

3rd get evaluate

Accicular

Test Market

2nd gtr 93

Coat :

4th gtr 92

29

2000 lb

$\pm 1\%$ $\pm 2\%$

$1\% + 2\%$

50 lb in

2020286903

HC Meetings

8/13/92

Wood pulp in ~~Open seems~~ Blend

Strongly.

a) ~~Adhesives~~ Adhesives High Content

Calvaries - Defects

J-Raw

Preliminary inquiries ask:

Bruce Steidle

~~④~~ Wreathed wood at Calvaries ~~④~~

b.) Mud

Bil-Raw

Eucalyptus

Similar analyses

1000 lbs of 100% Hardwood sheet

100% Hw \rightarrow

1000 lbs of 100% Hardwood sheet \circ

~~33~~ Constr sheet ~~④~~

80 - 20 Hw / SW 90/10

Timers

90

100

Furnish change over

80

100% Hw / SW

2020286904

Check additional mixture

Regular Papers £6,000 - £8,000 ~~lb of paper~~

£1,000

100 bobbins

100% Hhv 100 / 800 600 - 800

33 0.6% Citrate

28% Chalc

Yest week

2. Tipping Paper

lip release ; Davins 2000 cigs/min

control : Mts 236m² ; 2 trials ; difference between trials. Good gluability was focus. ~~flame~~ ~~flame~~ ~~studies~~ ~~need~~

b. Economy base sheet for cork-on-white tipping.

- op services ; 2 pallets of tipping ordered by purchasing.

3. Super slim Wrapper

11.7% Colorimetric vis 71-72%.

10.0 Coresta target

KC Sheet 9. 10.0 average

2020286905

Carl Jones on extra 8

Production

To monitor 2.7 range

Ranges at target

28 - 34% .5 mg tar change

EC chalk has

MICP

SS red

.06 EC range

tar .5 mg range

Coresta

.04 EC .4

News on

VS LSS

.05 for matched porosity
2 weeks of production left.

MICP 002 VI

3.9 Coresta

5.2

the High Chalk Paper

Grade 047

8 Coresta

Lower basis wt has been used up

4. High chalk study

X-RF method is complete + is ready
for transfer

5. MC 10-705 trials

Boat will run for 1 mo
about 1 mo.

2020286906

Accelerated audits. will compare to previous run. 1½ wks; Aug 3;

Production mgmt. was keeping an QA will sample will test

Cists made in July

6. Banded papers

- ① Moist sheet - to apply sheet about 20%
- ② Alcohol + Acetone
- ③ Felt to prevent cross machine shrinkage

Lab studies on adhesives + gluability.

in

Formation testing

Porosity

Image Analysis for band width + spacing

Navin - Analytical method for propyl paraben - uniformity

Latest; propyl paraben analyses.

2020286907

Yield

Processing aid w/o wetter sheet.

Art

trivedi 2 Cartons

Effectiveness

What are the problems

bound on edges -

cohesive.

Viscosity w/ cellulose need to be matched.

Reduced cellulose 5 diff depths.

20% sheet moisture

Application method

2020286908

Analytic : Basis wt

Storage analysis for uniformity of bands

width

What next steps

Mark Cruise

on date

9" Full diameter bobbins

Specify material +
High moisture trial application detail

~~Aspiration Macinability + ECR presence +
fire trials~~

Glucarinity in bands

2020286909

Tim Staff Mtg.

8/14/92 ① Asset disposal we will not write any off assets.

Tagged . . . Keep looking

② Jan Al box - Out Res in Al box.

Handmade boxes. no plastic pack (previously best pack)

2 wings APX Box

Rounded corner

Advantages - recyclable, fresh; with it

Downside - not too heavy or sturdy

③ Martin Ferry - new person in PED

~~Mr. [unclear] PMPT~~. Also to help w/

④ Planning - Restructuring of Major Programs.

1992 - Dom Prod: DEV + SUPPORT

PROD SUP PROD

1993 - Dom PROD DEV : EXISTING PROD SUPPORT

PROD DEV

PRODUCT TECHNOLOGY

WHAT PROJECTS - FLAVOR TECHNOLOGY

PROGS - CONSUMER RESEARCH TECHNOLOGY

+ WHAT RESOURCES PAPER Dev of novel papers
papermaking materials

FILTER

PACKAGING TECHNOLOGY

2 NEW PROGS BEING ESTABLISHED

① TOBACCO TECHNOLOGY

SMOKE TECHNOLOGY

2020286910

PROJECTS

Dates for Operational Plan

CO catalyst week

Timing - Operational Plans ~~2 Aug 21~~
Milestones of Progress + action Plan

Each Project

Support Activities - Plan for this
Document

Settings

NPP is a Program ; ~~present until~~
CAST LEAF

NET

PROJ TOMORROW

MAN HOURS AND PEOPLE ASSIGNED AS WRITTEN UP
Actuals

A-1 1:30 Prod Dev Today
→ 4:30

CALL BACK HAS STARTED for LS/LO

LOW VISIBLE

ACI 6 condition

back to Jan

about question

about reduced scope

They will ask this question on the
second call-back.

2020286911

8/17/92 Paper less Mfg
5 - 9 man width difference
across the web.

Navin - Calendars

A - Note team work benefit.
Cookies for the

October follow up

Communication

8/19/92 DICK STAFF MFG - SECURITY

- ① KSH - Security - Seminars marshaled & marshaled
- Security - OFFICES - locked up.
- PATROL OFFICERS on DUTY STREET -
- DICK will DO A SECURITY CHECK ON ~~MONDAY~~ EVENING
- * MONDAY - GIVE MFG - Shredding locking
- ② Emergency SERVICES - Retirement etc.
- Tidy Ridge to leave after getting cooler.
- ① Add Lengelotti - to go Project Tomorrow
- ② STICK Collins & handed

Performance Night 8 & 9 PM
Tim to reconvene the group
to get interpretation of constances.

2020286912

Spread sheet with competencies.

~~test~~ R&D may do ~~test~~ for ladder positions. ~~lilly~~ To head it up for 11 & below you not been select with. work w/ Cliff - Sheets from this directorate.

OB for 93

RF

2RF

Headcount on budget.

PA distribution

As Dec approaches SRN in March

PA re 55 1/4% 35 1/3%

Evening Seminars will continue \rightarrow

S

CONTINUOUS IMPROVEMENT for R&D TQM

seminar expenses for continuous im

20,000 for 40 people they become trainers

Intact work group

New Product Plan - $\frac{3}{4}$ per carton 19

2Q launch - Mar - 2000 units, lifetime monthly

3Q Marlboro wide ~~extra strong~~ KS

24.8 RC pack 20's + 10's in reg to

Circumf 23, 24.0 ~~part~~

Booklet pack 94

WIDES Red express

2020286913

Paperdeck Mtg

8/19/92 Reduced SS

A. Superstion wrapper

1. - G. Balenowski - specs.

Production Superstions ~ 70-71 %

2. Visibility testing
52%

KS -

3. Results coming back
4. Models in semiworks ready to be made
5. Handmade cig results
6. Lower closest to core

B. Experimental low SS papers

1. Rhombohedral calcium carbonate

- Mtg 14 different all papers but
Multiplex are available

2. Calendaring -

Option increase SS reduction
amount of

$\Delta 11 \rightarrow 6$ Coresta 75 \rightarrow 4 or 5

get 23.0 24.0 + 24.8

Outside loc \rightarrow for calendaring

Mg Carbonate

SB 6.8, 7.0

Baymag vs Synthetic magnesite : 51 + 53 %
no difference between them subjectively

Aqueous non-sol gel - new opns.

2020286914

How is 50 lb production coming along.

Everything ~~use~~

Aug 31 to start

Early Oct

Aug Sol-gel - most done up

Silicium Atomos Mori

Aguilon - Sample - class of material
Phase cleavage free vanillin

Memo ~~to~~ ~~date~~ ~~1/2~~ on Pyrolysis

work is done.

2020286915

Project Tomorrow
→ need cloth from Newman + Gloger.

Steam exploded fibers.

moving - Same - up in progress.

b. chlorine free - Sulfur free Pulp.

First prep 5 lb each

Soda Ash / $CaCO_3$ Na_2CO_3
Soda Oxygen / hard wood chips

Outputting

H. Specs to complete

- All samples taken; runs: after

no machinability problems.

Makes: not

4.

Several machines
increased in paper needs & open season
compared to last

8/24/92 Tim Sharrow, Arlington,
STAFF meeting
What Date does Tim want Op Plan
Tim Sharrow to work for COX Primary Processing
TCT meeting, study group
Professional Soc. members
as of Oct 1 will not pay

Security - from Dick meeting
Donthia wife

Budget - Rock

Budget ~~1992~~ ~~1993~~ ~~1994~~ ~~1995~~ ~~1996~~ ~~1997~~ ~~1998~~ ~~1999~~ ~~2000~~

At first of 1993 ~~1992~~ ~~1993~~ ~~1994~~ ~~1995~~ ~~1996~~ ~~1997~~ ~~1998~~ ~~1999~~ ~~2000~~ Reminders

Budget is to change batch beginning
development costs \$144,000 per yr.

Continuous Improvement \rightarrow
Total Quality Management
track
M. - K. King, J. J. Jernigan, Ann

2020286916

3 weeks ~ 7

TQM for all

Harry Lanzaletti → Dick : Responsible
for Project Tomorrow. LHP Presentation

Issues - vendors & security

Circumference Research

Mental on paper from the ~~paper~~
dispenser

IS Restructuring

Tom Petit-Bone IS VP

Jerry Ikhadi

Free Market vs Centralized

~~Houghton~~ Consumer Research → Prod Dev

Support ^{to} + Int'l.

Being Measured agst what we can't affect

Sept 21-23 Review where BANE is.

1st Concrete figures on structure. Petreca, Duran
etc.
Issues; decision making process

Team work

Oct 21, 22

Nov 11-12-13

Richmond Tobacco Co

2020286917

Dick State MTC

- ④ All assets in the shop. Sign for the assets.
- ④ Check on document receiving tomorrow

Budgetary constraint

Due to resident Houghton's meeting
10 min on Defeat

Markings - Shift in literary scenes
down.

卷之三

Brussels sprouts are harvested in

• Life + trapping
• Trapping

لکھنؤ: ہریتھری
اے ہن دھری
لکھنؤ: ہریتھری

卷之三

2020286918

Permanent
Permit

Material Pass for gifts from Seminole

Assets, info & materials

8/27/92 Staff Mtg.

Low SS / LO - models are out

Tan + Melissa out next 2 wks

Dick- Op Plans: Improve process

Need to prioritize work:

Op. plans - 93 Commitments

Justification for opening

2020286919

9/1/92 Paper Tech Meeting

Last 2 shipments were

New-Off- procedures-installed. - R&D - Korean (K-2)

New &

Sept. Oct. 1200 holding

last off design -

loss VS - Consumer test

1 run on visibility

DT studies in progress too :

Acid treatment model:

1:

Phone

Coated. Recommand for perforation. -

Anesthetized

Additional

May - 10 hrs made. 11 - twelve 1
=

Aqueous

Memo on :

MBR Backs

F. Tippin

Machining trials measured well

2020286920

WOOD PULP

A1E1

9:00 AM

1. Jim Descriptive aspects

Na/anthra 5 lbs of
Na/O₂ 5 lbs

Cl_2 + S free
 ClO_2

Bir Recht

9/3 Jim STAFF mtg

Bonnie O'Brien

Requisition

Names of people taking class during the day

Sept 17 Richmond mtg - Great KC mtg

Al Pack

Signed deals w/ machine shops

Sept 10 Rx + wide

Norma Suter - New merit based orgs from POG

22nd mtg MLTS 100

Reiter here next Thurs

Sept 18 Budget review w/ SKH STT

Sept 9 Capital budget " CIP 2011

Mag Carbonate Patent by Ecusta

ET separate & determine

2020286921

7.0 1.1

1/5 TAN's - Products

2.8/4.0 New interested some not
didn't perceive
Attitude & life style made a diff.
Any change
Reduced risk lessens fear around.
Ask the firm; turn into a benefit

Most paid it so similar to
my own brand.
Even w/ Mts
Open ended;

Can't detect any ~~any~~ differences w/
spec

TIC transmission spec. on Paper
DL dig KC
alt 30° shape is different

JTI John Nawrot sees no
differences, although Japanese

Molecular Structure Determination

Thermal Chromatography

2020286922

Fingerprinting ~~lignin~~

Hardwood in digesting - HW

① Confirmation of the m/z 60 peak
as acetic acid as glycolaldehyde

② Thermal Chromatography on the ^{100%} ^{100%} SW / HW - ~~20%~~

③ KC Flax 50/50 vs 80/20
Eucalyptus wood control vs.

Barko panel to do this

④ Try SHT ~~as~~ for subjectives

TC/MS

2020286923

5.8 %

- all extinguished CL-611

Mod III 6.0 %

MBR - Red by 8 mg/min

Mod ^{8%}
level eric 6.3 %

3/4 est. ~ 10 mg/min reduction

Mod IV 6.4 %

Reduced by 5 mg/min 42 % solids

9% Application level

Reduce MBR by 15 ⁻²⁰ mg/min

Avicel loading vs MBR rate

→ 15 mg

Malboro

DON TRAINOR → small paper

JOHN HARN

==== → small

Bill Uniformity of permeability

+

B

March 31 test date

Aug 94

BJ series - description

2020286924

AUF - what samples are ^{for} ==

6% wt
application

micro uniformity

↔ Context → D. McRae - about optical

Microdensitometer - optical
optical

→ Two rolls double bobbins

uni
Avicel CL-611 - 6%

3.5% - 3

Entire sheet 1 set at

CL-611 - 4% two bobbins

Double bobbins

Make w/o

25 mg/min in a cyst
35 or less.

2020286925

Sign Name DE 1

W/in band - Procen Review May

9/92 Tindall's memo on

Section leader - accounts for a classification

Final deadline of the 18th for design's sheet.

Ref
Sept 17 - P: m2

Va Skins 10/LSS

~~Non mental variables~~

8:30 AM MONDAY Review on LSS ~~POC~~

JAN - Quantitative

-

Finance questionnaire as in LA - product

is perform, uses:

high - visual + oral offer

? ← turn rate - very close to own

turns,

life style + behavior affects valuation

2020286926

(X)

Extend KC

(+)

Call Tel

broadband range - some items she
would like

Joint development agreement w/ exclusivity
agreement.

(X)

(X)

Review + Cliff to talk about key
technical issues in a general sense.

Jack w/ Cliff on a regular basis

MICP - Check w/ Tim Schardt
no other date

Basis wt variation →

Poor ability to target the filter wires

RTD is off now - plan for Pin Wels

Another

Basis wt variation → Can they control
it any better on a flat
wire machine?

2020286927